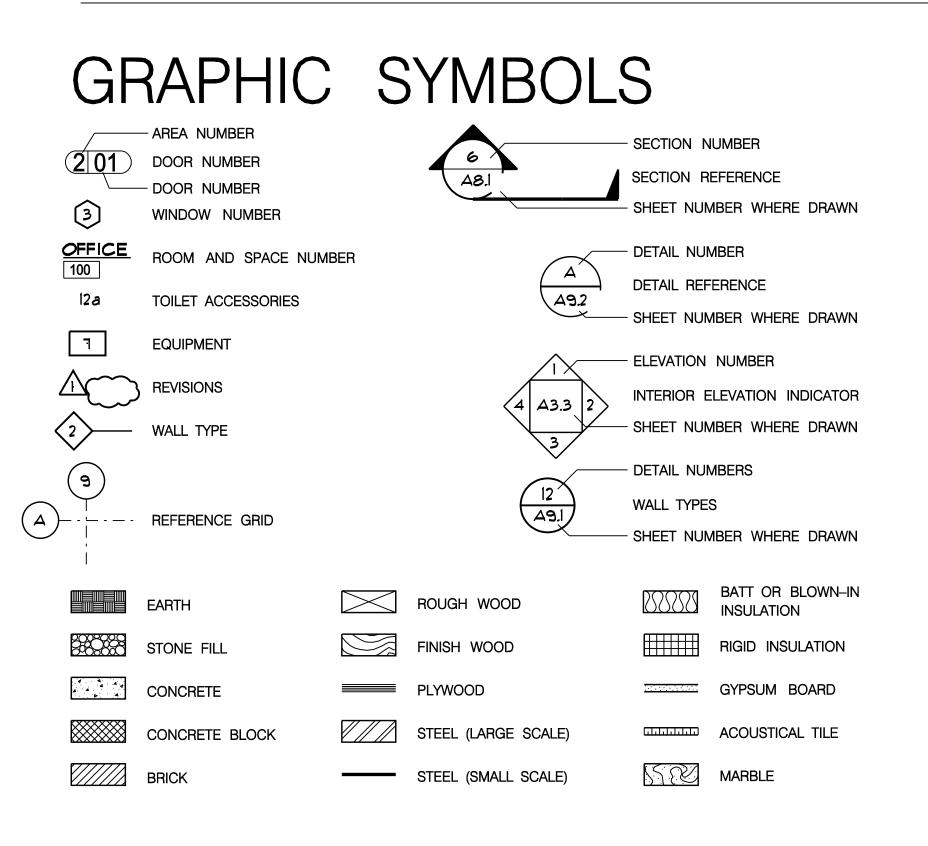
## ABBREVIATIONS

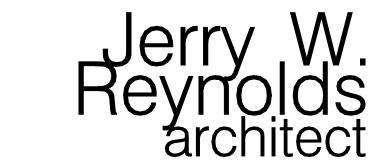
AC	acoustical
ACM	acoustical mylar
AFF	above finished floor
AGG	aggregate
AL	aluminum
BLK	block
BD	board
BRK	brick
BRZ	bronze
CPT	carpet (ed)
CK	caulk (ing)
CLG	ceiling
CER	ceramic
CLR	coloring
СТ	ceramic tile
С	concrete
CMU	concrete masonry unit
CONT	continuous or continue
DS	downspout
DTL	detail
DNG	drawing
DF	drinking fountain
ELEC	electric (al)
EP	epoxy paint
EQ	equal
EWH	electric water heater
EXP	exposed
EXT	exterior
FAC	factory applied finish
FIN	finish (ed)
FLR	floor (ing)
FBO	furnished by others
GA	gauge
GALV	galvanized
GL	glass, glazing

GB grab bar GPBD gypsum board HBD hardboard HDW hardware HWD hardwood HT height HCW hollow core wood HM hollow metal INCL include (d), (ing) INT interior JT joint KIT kitchen LAM laminate (d) MTL material (s) MES metal edge strip MET metal MISC miscellaneous MR moisture resistant NIC not in contract NTS not to scale 0 oil OC on center (s) OPP opposite OH overhead paint (ed) PNL paneling PBD particle board PVMT pavement PL plaster PLAS plastic PLAM plastic laminate PWD plywood QT quarry tile REF refrigerator

RM	room
RB	rubber base
SLR	sealer
SEC	section
SHT	sheet
SIM	similar
SCW	solid core wood
SB	splash block
SPEC	specification (s)
SS	stainless steel
ST	stain
STL	steel
STN	stone
STUC	stucco
SYM	symmetry (ical)
SYN	synthetic
ΤZ	terrazzo
THK	thick (ness)
THR	threshold
T&G	tongue & groove
TXP	textured paint
TYP	typical
UNF	unfinished
VIN	vinyl
VCT	vinyl composite tile
VWC	vinyl wall covering
WSCT	wainscot
WRGB	water-resistant gyp bd
W	wax
WIN	window
WG	wired glass
WD	wood



# ARCHITECT



architecture planning interior design 904 WEST CYNTHIA TRAIL GOODLETTSVILLE, TN 37072-3517 PHONE (615) 855 - 0406

#### CONSULTANTS



## BUILDING CODES

International Building Code (IBC), 2012 edition International Mechanical Code (IMC), 2012 edition International Plumbing Code (IPC), 2012 edition ADA Standards for Accessible Design, 2010 edition

#### CODE INFORMATION

OCCUPANCY CLASSIFICATION - IBC SECTION 304 - BUSINESS GROUP B (LESS THAN 50 OCCUPANTS)

OCCUPANT LOAD - IBC TABLE 1004.1.2 BUSINESS, 100 SF GROSS PER OCCUPANT /ACCESSORY EQUIPMENT /STORAGE 300 SF GROSS PER OCCUPANT

ALLOWABLE HEIGHT/AREA - IBC TABLE 503 - HEIGHT = 40', ALLOWABLE AREA BUSINESS = 9,000

CONSTRUCTION TYPE - IBC TABLE 602.3: TYPE VB

EXIT ACCESS TRAVEL DISTANCE - IBC TABLE 1016.1 - MAXIMUM TRAVEL DISTANCE FOR NON-SPRINKLED = 200'

EGRESS WIDTH PER OCCUPANT SERVED - IBC TABLE 1005.3.2 = STAIRWAYS 0.3" /OTHER 0.2" PER OCCUPANT

#### BUILDING DATA

BUILDING ADDITION: 253 SF AT 300 SF PER OCCUPANT = 1 OCCUPANT EXISTING BUILDING FIRST FLOOR: 439 SF PER OCCUPANT AT 100 SF PER OCCUPANT = 5 OCCUPANTS EXISTING BUILDING SECOND FLOOR: 439 SF AT 300 SF PER OCCUPANT = 2 OCCUPANTS TOTAL BUILDING: 1,130.5 SF TOTAL WITH 8 OCCUPANTS TOTAL TOILET BUILDING HEIGHT: 20'-11"

## APPROVAL STAMPS

COVER DRAWING CODES

A0.1

ARCHITECTUR/

A2.1 FLOOR A3.1 BUILDING BUILDING A3.2 A5.1 OPENING A8.2 WALL SE

STRUCTURAL FOUNDA S2.1 ROOF FI

S2.2

PLUMBING

P1.0 PLUMBIN P2.0 PLUMBIN

MECHANICAL MECHAN M1.0

ELECTRICAL

E1.1 ELECTR FLOOR E2.1 RISER [ E3.1

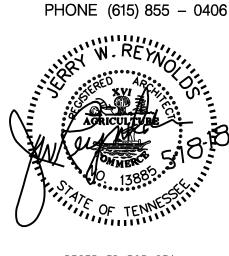




904 WEST CYNTHIA TRAIL

GOODLETTSVILLE, TN 37072-3517

#### DRAWING INDEX REV. NO. REV. DATE



RESERVED FOR SEAL

IG		
AND INFO	2	5/18/2018
PLAN NG ELEVATIONS NG SECTIONS NGS SECTIONS	2 0 0 0	5/18/2018 2/9/2018 2/9/2018 2/9/2018 2/9/2018 2/9/2018
DATION PLAN FRAMING PLAN	0 0	2/26/2018 2/26/2018
ING FLOOR PLAN ING SCHEDULES	0 0	2/14/2018 2/14/2018
NICAL FLOOR PLAN	0	2/14/2018
Rical Site Plan, Site Details Plans, Legend, Notes, Details, Schedules Diagram, Specifications, Energy Code Compliance	0 0 0	2/9/2018 2/9/2018 2/9/2018



2 5/18/18	JR REVIEW COMMENTS
NO. DATE	BY REVISION
DRAWN BY	JERRY W. REYNOLDS
DESIGNED B	JERRY W. REYNOLDS
APPROVED E	Y
JOB NO.	517A556
DATE	2/9/2018
SCALE	NOT TO SCALE

DRAWING NUMBER



#### GENERAL MECHANICAL SPECIFICATIONS

FURNISH, INSTALL, PROVIDE AND MAKE OPERATIVE ALL EQUIPMENT, MATERIALS, SUPERVISION, LABOR AND ANY AND ALL ITEMS NECESSARY FOR THE PROPER INSTALLATION OF A CORRECTLY FUNCTIONING MECHANICAL SYSTEM AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.

EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. EQUALS SHALL BE ACCEPTED FOR EQUIPMENT UNLESS OTHERWISE NOTED.

ORDINANCES, PERMITS AND CODES: THE WORKMANSHIP AND MATERIALS COVERED BY THESE SPECIFICATIONS SHALL CONFORM TO ALL REGULATIONS OF ALL THE AUTHORITIES HAVING JURISDICTION.

THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, CONNECTION AND INSPECTION FEES AS REQUIRED FOR THE COMPLETE INSTALLATION OF THE MECHANICAL SYSTEM.

THE LOCATION OF DUCTS, PIPE AND EQUIPMENT, AS SHOWN ON THE DRAWINGS, IS DIAGRAMMATIC AND SCHEMATIC AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE HIS OWN WORKING LAYOUT TO ELIMINATE ALL STRUCTURAL AND ARCHITECTURAL CONFLICTS IN THE BUILDING.

VERIFY ALL MEASUREMENTS AT THE SITE AND COORDINATE ALL WORK SO THAT IT DOES NOT INTERFERE WITH THE WORK OF THE OTHER TRADES.

INSULATION: ALL INSULATION, INCLUDING JACKET, OR FACING AND ADHESIVE USED TO ADHERE FACING OR JACKET TO THE INSULATION SHALL HAVE A COMPOSITE FIRE AND SMOKE HAZARD RATING TESTED BY THE PROCEDURE RECOMMENDED BY ASTM E-84, NFPA 225 OR U.L. 723, NOT EXCEEDING: FLAME SPREAD 25, SMOKE DEVELOPED 50. ALL INSULATION ACCESSORIES SHALL ALSO HAVE THE RATING LISTED ABOVE.

SUPPLY AIR DUCT SHALL BE INSULATED EXTERNALLY WITH 2 INCH THICK, R-5, 0.75 PSF DENSITY FIBERGLASS INSULATION INCLUDING A VAPOR BARRIER.

EXHAUST DUCT IS NOT REQUIRED TO BE INSULATED.

ALL DUCTWORK SHALL BE CONSTRUCTED OF THE BEST BLOOM GALVANIZED SHEETS, FREE FROM BLISTER AND IMPERFECTIONS, AND WITH GAUGES, JOINTS, BRACING AND SUPPORTS IN STRICT ACCORDANCE WITH SMACNA STANDARDS. DUCT SIZES SHOWN ON THE DRAWINGS ARE NET INSIDE CLEAR. SCREWS SHALL BE CADMIUM PLATED. ROUND DUCT RUN-OUTS SHALL BE MIN. 26 GA. SHEET METAL. HANGERS SHALL BE 1" x 1/8" GALV. BAND 4' ON CENTER

FLEXIBLE DUCT SHALL NOT BE USED ON THIS PROJECT. ALL DUCTS AND FITTINGS SHALL BE RIGID SHEET METAL AS DESCRIBED ABOVE.

PROVIDE FLEXIBLE NEOPRENE DUCT CONNECTORS ON THE DISCHARGE AND ENTERING SIDES OF ALL VIBRATING EQUIPMENT TO WHICH DUCTWORK IS ATTACHED.

DUCT SIZES SHOWN ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS.

ALL PIPING. DUCTS, VENTS, ETC EXTENDING THRU THE WALL SHALL BE FLASHED AND COUNTERFLASHED IN A WATERPROOF MANNER. NO PIPING, DUCTS OR VENTS SHALL PENETRATE THE ROOF OF THIS STRUCTURE.

ALL VALVES AND PIPING SPECIALTIES SHALL BE LINE SIZED UNLESS NOTED OTHERWISE - USE ECCENTRIC REDUCERS ON CONTROL VALVES WHERE REQUIRED.

INSTALL MANUAL VOLUME DAMPERS AT EACH BRANCH RUN-OUT.

ALL UNITS SHALL BE BALANCED TO WITHIN 5% OF THE DESIGN AIR QUANTITY. BALANCE DIFFUSERS AND REGISTERS TO QUANTITIES SHOWN ON DRAWINGS.

HVAC CONTRACTOR SHALL LEAVE HIS WORK IN PERFECT WORKING CONDITION AND SHALL GUARANTEE SAME FOR A PERIOD OF TWELVE (12) MONTHS FROM DATE OF FINAL ACCEPTANCE.

IT IS THE INTENT OF THESE DRAWINGS TO COVER ALL WORK FOR A COMPLETE FIRST CLASS MECHANICAL INSTALLATION - ANY EQUIPMENT, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THIS CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE CONSTRUCTION MANAGER) SHALL BE FURNISHED AND INSTALLED BY THE HVAC CONTRACTOR AS PART OF HIS TOTAL WORK.

ELECTRIC HEATER SCHEDULE			
IDENTIFICATION	EH-1		
MANUFACTURER	INDEECO		
SERIES	QUA		
HEAT CAPACITY (kW)	12		
SIZE (IN)	12" x 8"		
VOLTAGE / PHASE	240/1ø		
ACCESSORIES REQUIRED:	A, B, C, D, E, F		
NOTES: A: UNITS SHALL BE U.L. LISTED B: THERMAL OVERLOAD PROTECTION C: OPEN COIL HEATING ELEMENT D: 24 VOLT TRANSFORMER E: FAN INTERLOCK			

F: AIRFLOW SWITCH

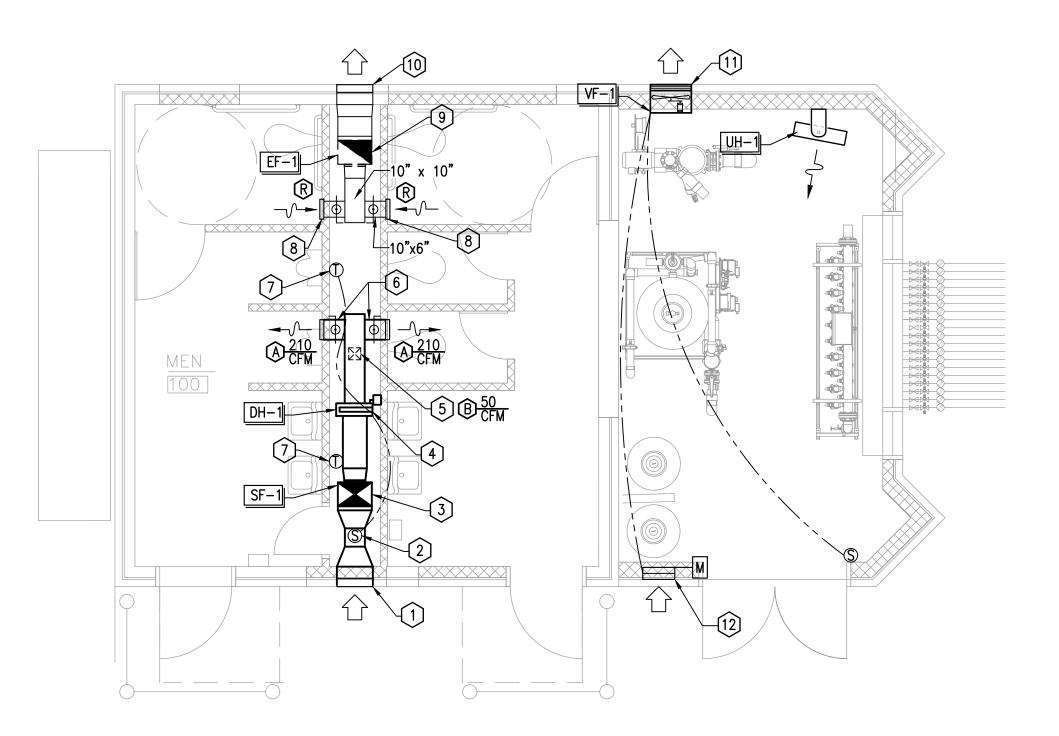
MECHANICAL LEGEND				
SYMBOL	DESCRIPTION			
	NEW SUPPLY AIR DUCTWORK			
	NEW EXHAUST DUCTWORK			
	MANUAL VOLUME DAMPER			
	SUPPLY FAN			
	EXHAUST FAN			
100 EFM	AIR DISTRIBUTION IDENTIFICATION (REFER TO AIR DISTRIBUTION SCHEDULE)			
EF-1	EQUIPMENT LABEL (SEE MECH. EQUIP. SCHEDULE FOR INFO.)			
(Ī)	WALL MOUNTED THERMOSTAT (52" A.F.F.)			
S	DUCT MOUNTED TEMPERATURE SENSOR			
<b>-</b> ∿ ⟨⊃	DIRECTION OF AIR FLOW			

FAN SCHEDULE					
FAN IDENTIFICATION EF-1 SF-1 VF-1					
MANUFACTURER	СООК	СООК			
MODEL NUMBER	GN-622	GN-720	12S15D		
SERVICE TYPE	TOILET EXHAUST	MAKE-UP AIR SUPPLY	VENTILATION		
FAN TYPE	IN-LINE	IN-LINE	WALL-PROP		
CFM	420	470	600		
ESP	0.35	0.50	0.15		
SONES	3.0	3.0	3.0		
MOTOR HP	137 WATTS	175 WATTS	1/8 HP		
VOLTAGE/PHASE	120/1ø	120/1ø	120/1ø		
WEIGHT	32 LBS.	36 LBS.	36 LBS.		
ACCESSORIES REQUIRED	A, B	B, C	B, D		
ACCESSORIES: A: BACKDRAFT DAMPER B: SUPPORT FROM STRUCTURE		TAT			
REMARKS: EF-1 TO BE CONTROLLED BY OCCUF SF-1 TO BE ENERGIZED WHEN EF-1 EF-1 IF THERMOSTAT CALLS FOR HE	IS ENERGIZED. SF-1 SHALL				

AIR DISTRIBUTION SCHEDULE							
SYMBOL	MFGR. & MODEL #	DEVICE	FACE	SIZE	VOLUME CONTROL	COLLAR SIZE	REMARKS
Â	PRICE MOD. 910	SUPPLY GRILLE	LOUVERED	10" x 6"	-	-	SEE NOTES
B	PRICE MOD. 91	SUPPLY GRILLE	LOUVERED	6" x 6"	-	-	SEE NOTES
R	PRICE MOD. 91FH	RETURN GRILLE	LOUVERED	10" x 6"	-	-	SEE NOTES
2. PROV	DEVICE COLORS TO BE S VIDE SURFACE MTD. TYPE AIR DEVICES TO BE HEAV	BORDER FOR G	YPBOARD WALLS.				

#### MECHANICAL DRAWING NOTES

- FURNISH AND INSTALL RUSKIN ELF375DXH 18"x18" FRESH AIR INTAKE LOUVER AS HIGH AS POSSIBLE WITHIN BRICK WALL AT BUILDING EXTERIOR.
- 2 DUCT MOUNTED AIR TEMPERATURE SENSOR IN FRESH AIRSTREAM TO ACTIVATE ELECTRIC DUCT HEATER WHEN OUTDOOR AIR IS BELOW 55°F
- 3 SUPPLY FAN AND ASSOCIATED DUCTWORK INSTALLED WITHIN PLUMBING CHASE/CLOSET.
- 4 ELECTRIC DUCT HEATER (SLIDE-IN TYPE) LOCATED TO PROMDE MFGR RECOMMENDED DUCT LENGTHS BEFORE AND AFTER HEATER
- SUPPLY AIR GRILL MOUNTED ON BOTTOM OF DUCT WITH INTEGRAL DAMPER. BALANCE TO AIRFLOW QUANTITY INDICATED. 5
- 6 EXTEND 10"x6" BRANCH SUPPLY DUCT TO CONNECT TO 10"x6" SUPPLY GRILLE. BALANCE TO AIRFLOW INDICATED.
- $\overline{7}$ WALL MOUNTED THERMOSTAT LOCATED WITHIN PLUMBING CHASE/CLOSET TO ACTIVATE SUPPLY FAN AND HEATER WHEN SPACE TEMPERATURE IS BELOW 50°F. THERMOSTAT CONTROL SHALL OVERRIDE OCCUPANCY SENSOR CONTROL OF EXHAUST FAN/SUPPLY FAN.
- 8 HEAVY DUTY STEEL EXHAUST GRILLE FLUSH WITH WALL SURFACE. EXHAUST DUCT PENETRATES CHASE WALL BELOW BOND BEAM (FIELD COORDINATE WITH STRUCTURE)
- 9 EHXAUST FAN AND ASSOCIATED DUCTWORK INSTALLED WITHIN PLUMBING CHASE/CLOSET.
- 10 FURNISH AND INSTALL RUSKIN ELF375DXH 18"X18" EXHAUST AIR LOUVER AS HIGH AS POSSIBLE WITHIN BRICK WALL AT BUILDING EXTERIOR.
- 11 RUSKIN L330 18" x 18" STEEL, STATIONARY EXHAUST LOUVER INSTALLED AT FAN OUTLET IN EXTERIOR WALL.
- RUSKIN ELM6375DX 24"  $\times$  18" ALUMINUM INTAKE LOUVER WITH MIN. 0.85 FT<sup>2</sup> FREE AREA, BIRDSCREEN, WALL SLEEVE, AND MOTORIZED ACTUATOR TO INTERLOCK WITH (12) VENTILATION FAN "VF-1".



## SCALE:



Jerry Herrich States and Antonia
Gresham Schelton ENGINEERING 1163 West Main St Franklin, TN 37064 Tel: 615.730.9111 Fax: 615.224.3599 Project #17-178
LOCAL PARK AND RECREATION FUND THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION RESTROOM EQUIPMENT BUILDING PEAY PARK SPLASH PAD GOODLETTSVILLE, TENNESSEE
Image: Markow Stress Revision 1 02.20.18   NO. DATE BY REVISION   DRAWN BY MWD / SCT   DESIGNED BY ECG   APPROVED BY ECG   ARCH JOB NO. 517A556   DATE 01/30/2018   SCALE NOTED

MECHANICAL FLOOR PLAN

CADD FILE NO.

DRAWING NUMBER